

# Cook County Health

## Process of Care

Metrics for the Quality Domain

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Director, Ambulatory Procedures



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# Process of Care Metrics

## Rate of Excess Days

- Heart Failure
- Pneumonia
- Myocardial Infarction

Excess days are the number of days spent:

1. Emergency dept
2. Observation stay
3. Unplanned inpatient readmission

## Hospital Acquired Conditions

- *C difficile* Infection
- CAUTI (Catheter associated urinary tract infection)
- Total Hip/Knee Complications

## PSI-90 Composite (Patient Safety Indicator)

- PSI-03 (pressure ulcer)
- PSI-06 (Pneumothorax )
- PSI-09 (Periop hemorrhage)
- PSI-11 (Post op respiratory failure)
- PSI-12 (PE/DVT)
- PSI-13 (Postop sepsis)

## ED Left without being seen

- Median ED Time (admit)
- Median ED Time (discharge)
- Admit Decision to ED Depart

# Excess Days in Acute Care



Dr. Poushali Bhatthacharjee, MD, MS

Attending Physician, Division of Hospital Medicine

Darleen Vlahovic, RN, MBA, BSN

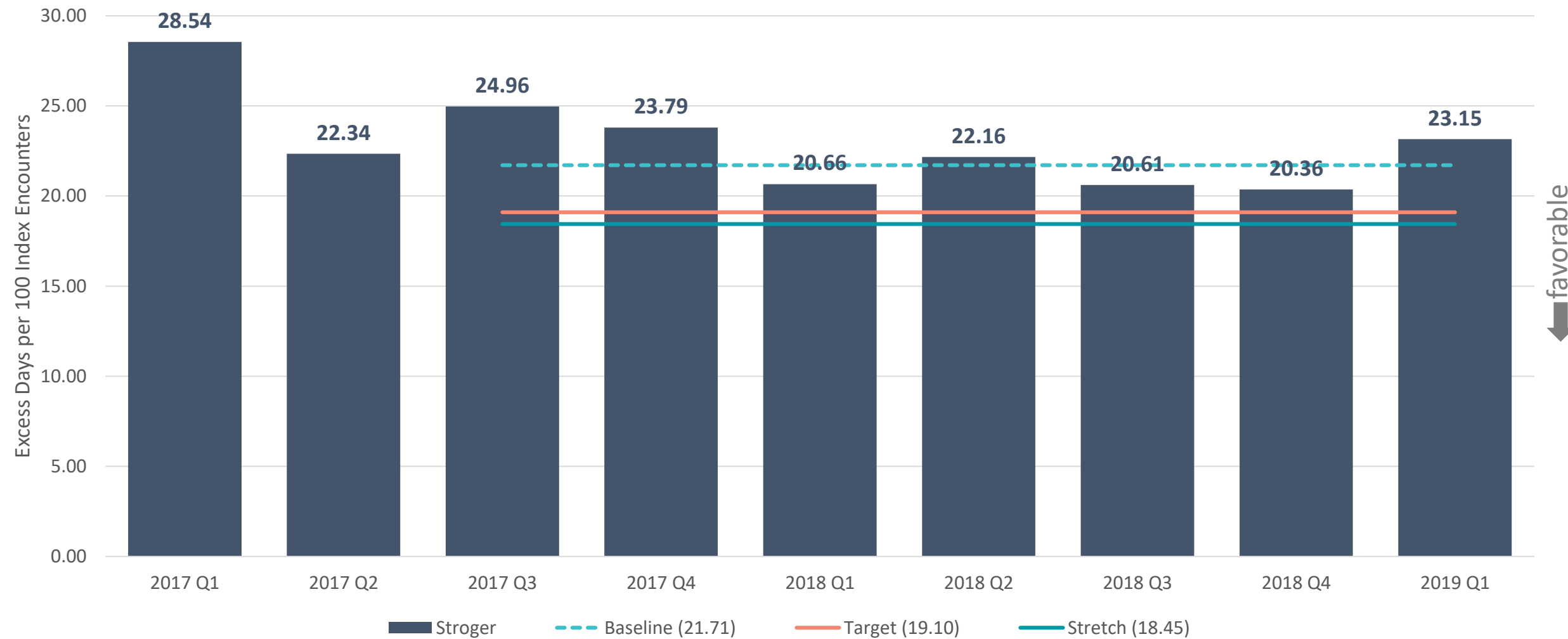
Director, Medical Surgical Nursing



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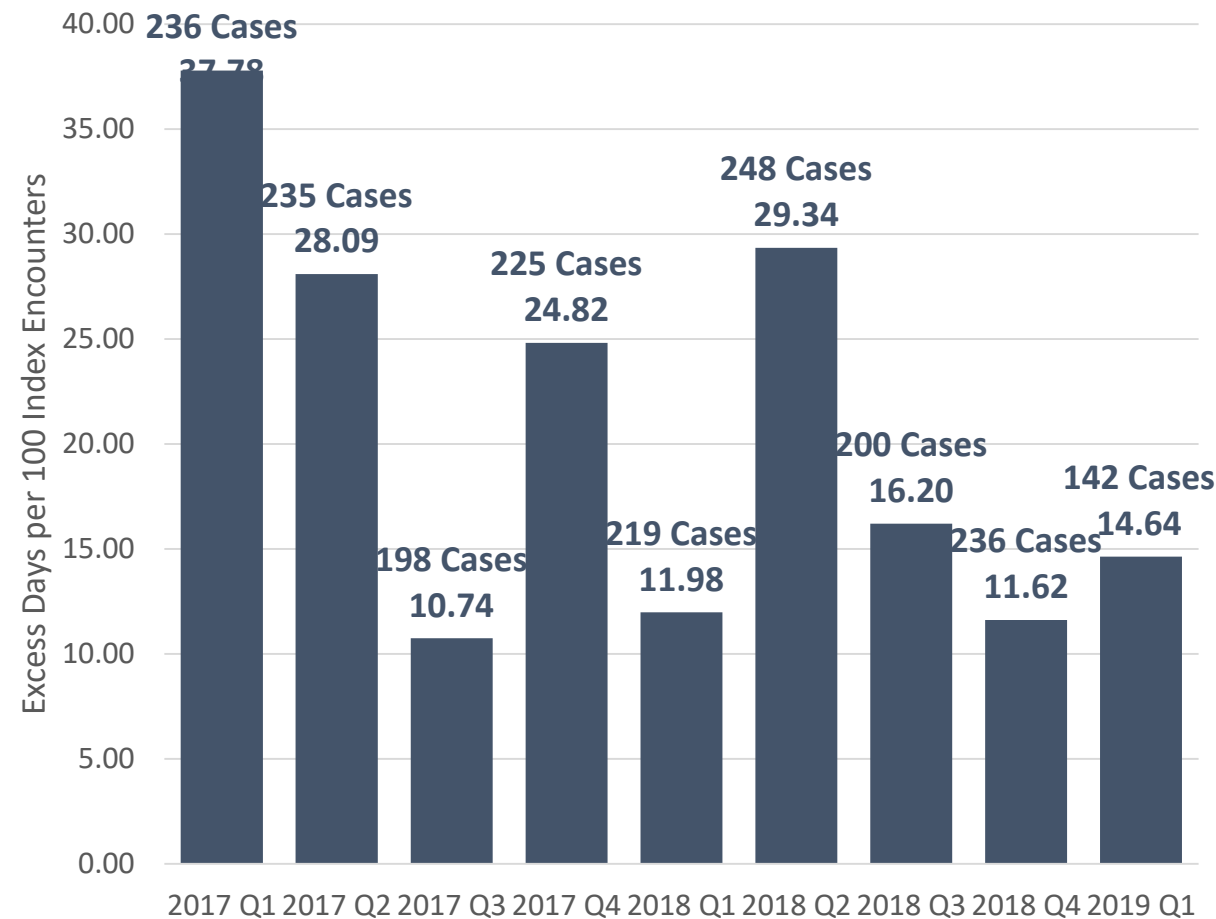
# Excess Days in Acute Care (days spent in ED, observation, or unplanned readmission)

## Excess Days per 100 Index Encounters

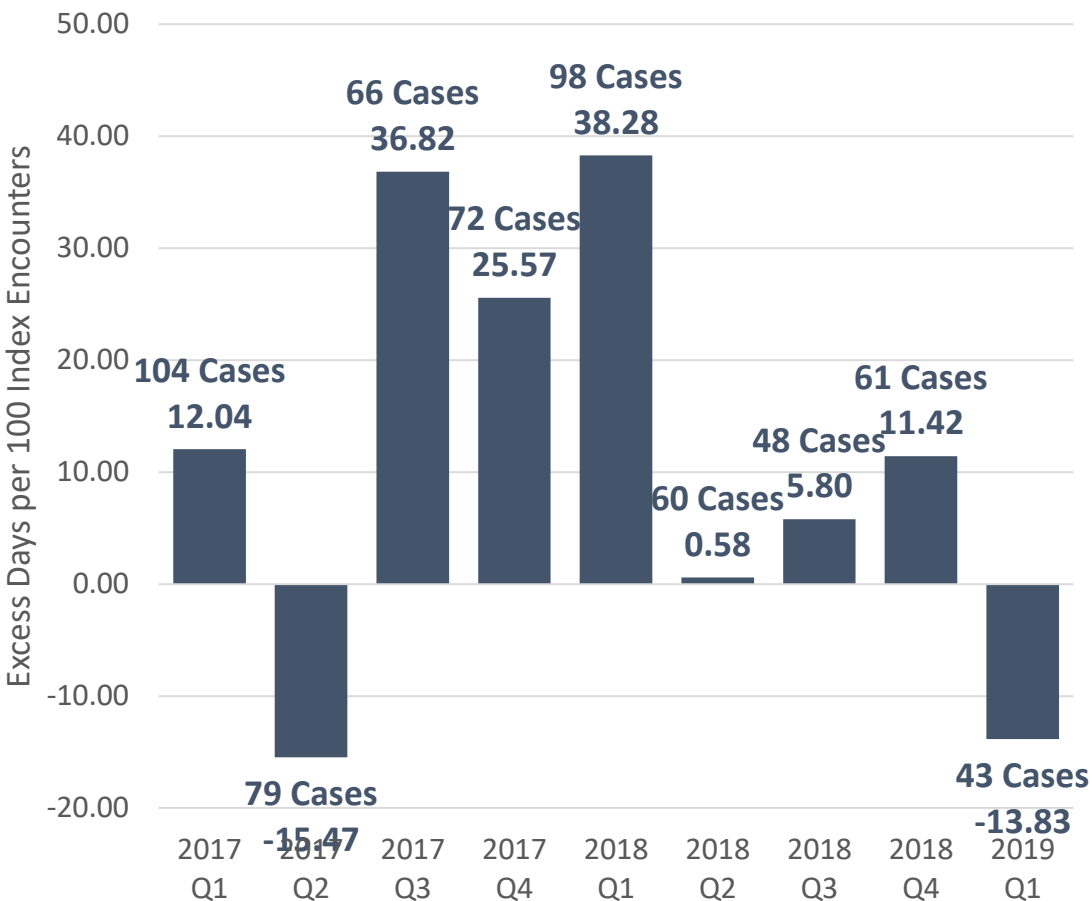


# Excess Days in Acute Care – Heart Failure

## Heart Failure



## Pneumonia



favorable



# Excess Days – Plan-

- Top Performing Measures

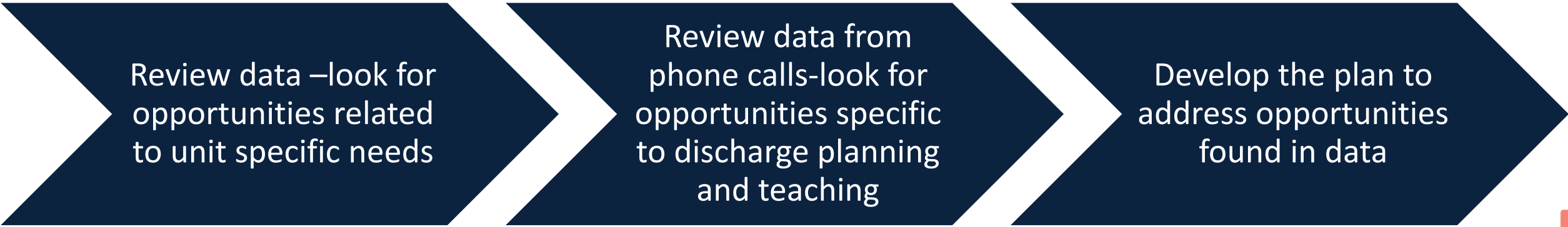
- Pneumonia

- Opportunity for Improvement

- Heart Failure: 3 domains
  1. Inpatient management  
(targeting high risk and advanced heart failure)
  2. Discharge process  
(Cardiology APN for discharge)
  3. Transitions of care  
(4 Flex (inpatient unit) piloting post-discharge calls)



# Our plan to decrease excess days for patients with Heart Failure



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graph LR; A[Review data –look for opportunities related to unit specific needs] --> B[Review data from phone calls-look for opportunities specific to discharge planning and teaching]; B --> C[Develop the plan to address opportunities found in data];
```

Review data –look for opportunities related to unit specific needs

Review data from phone calls-look for opportunities specific to discharge planning and teaching

Develop the plan to address opportunities found in data

# Hospital Acquired Conditions



Dr. Sharon Welbel, MD

CAUTI – catheter associated urinary tract infection

CDI – clostridium Difficile Infection

THNC – Total hip & Knee complications

System-wide Director of Infection Control & Hospital Epidemiology

Dr. Jeannette White, DNP, RN, NE-BC

Director of Nursing Professional Development and Education

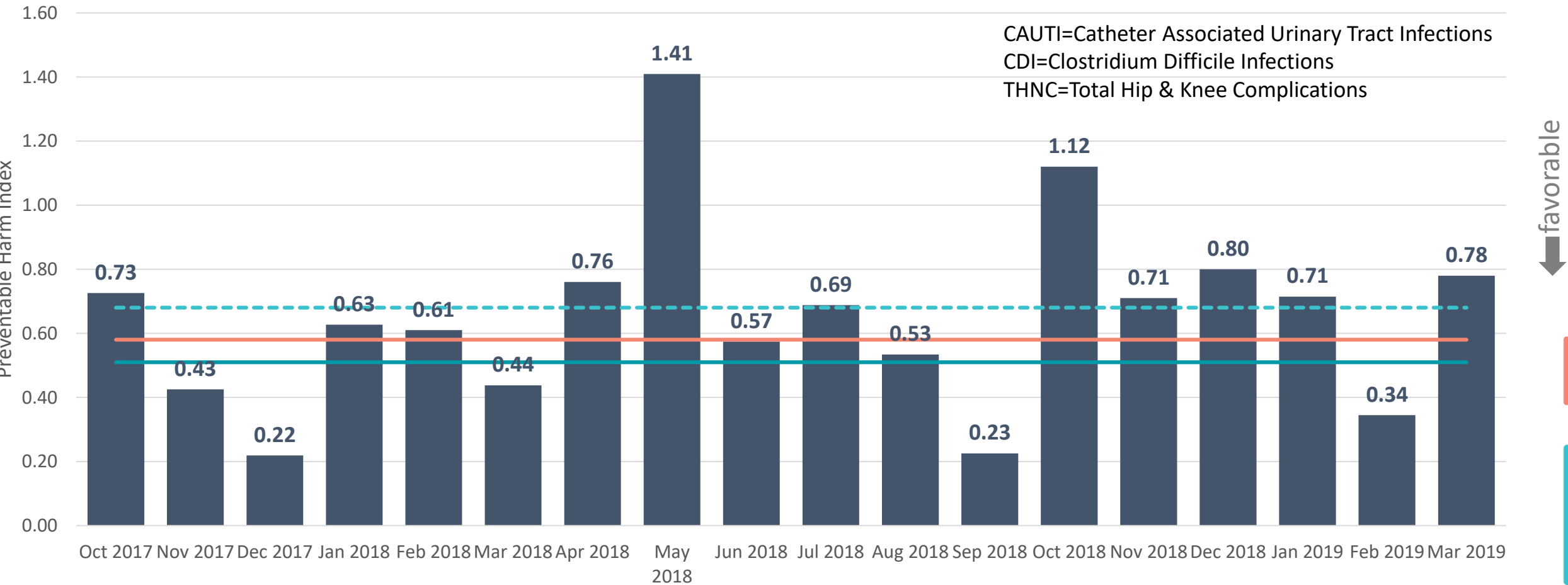


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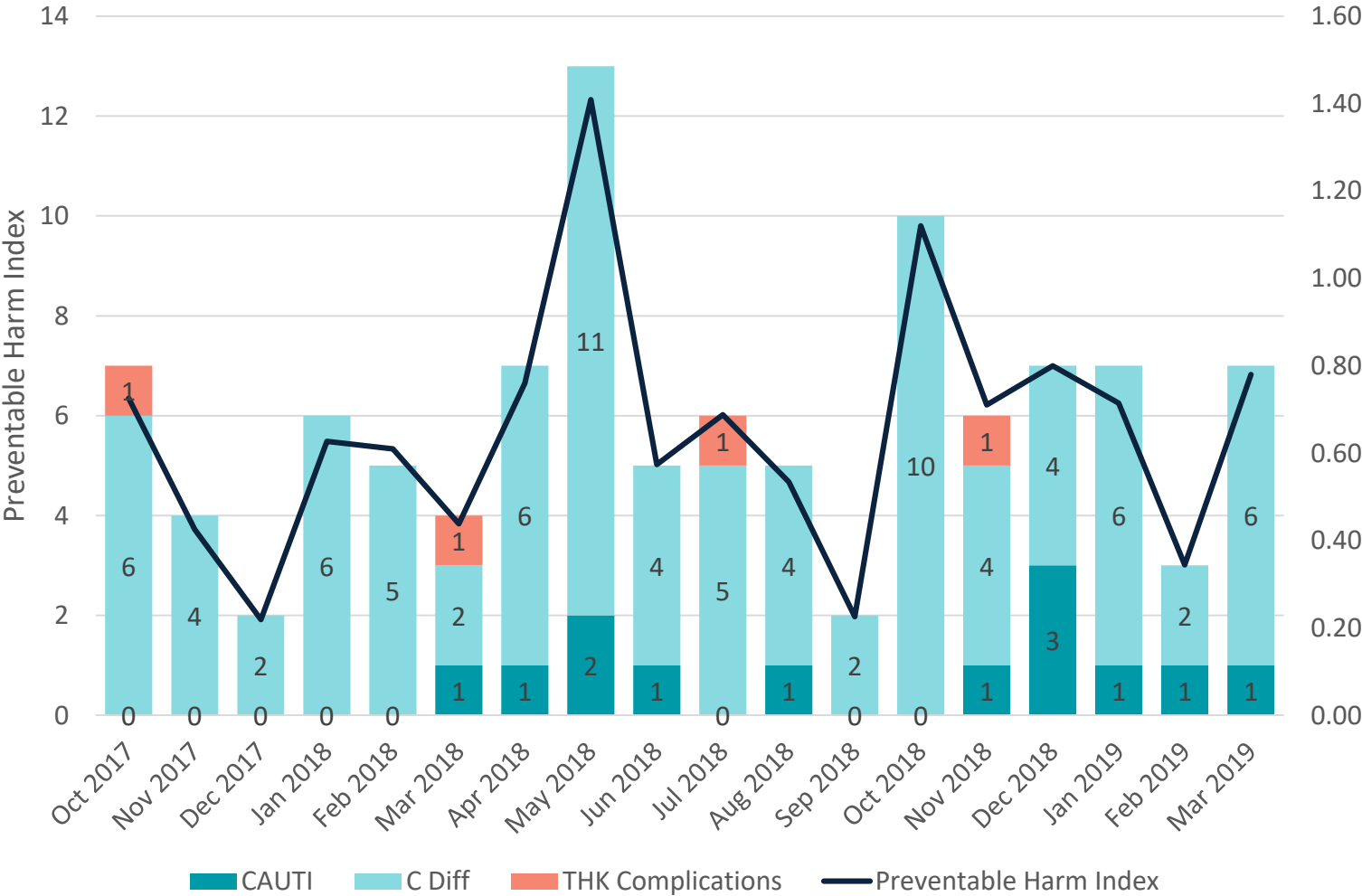
# Cook County Preventable Harm Index

Total Harm Events per 1,000 Patient Days=  $\frac{\text{\# of CAUTI} + \text{\# CDI} + \text{THNC}}{\text{Total Patient Days}} \times 1,000$



# Cook County Preventable Harm Index

Total Harm Events per 1,000 Patient Days



**Top Performing Metric:**

\*Catheter Associated UTI

**Opportunities for Improvement:**

\**C. diff* infection

\*Total Hip & Knee Complications

favorable



# Planning

- Enhance Nursing Education regarding *C. diff* infections, etiology and impact
- Develop a nurse driven protocol enabling a nurse to send specimens for a *C. diff* test without an order within the first 48 hours of admission based on RN assessments and patient report
- Expand hand hygiene campaign with further monitoring for both hand hygiene and applying/removing personal protective equipment

# What we are currently doing

- Electronic rounds
- Physical rounds
- Soap & water signs
- Placing patients on isolation quickly
- Environmental awareness

# Our Plan

Goal is to decrease *C. diff* infections by 40% (SIR 0.6) by 12/19

Nursing Education  
on *C. diff* awareness

Nurse Driven  
Protocol to order *C.  
diff* testing within  
72 hours of  
admission

Handwashing and  
PPE monitoring

# PSI-90 Composite

## (patient safety indicator)



Dr. Steve Bonomo, MD

Associate Chair, Department of Surgery

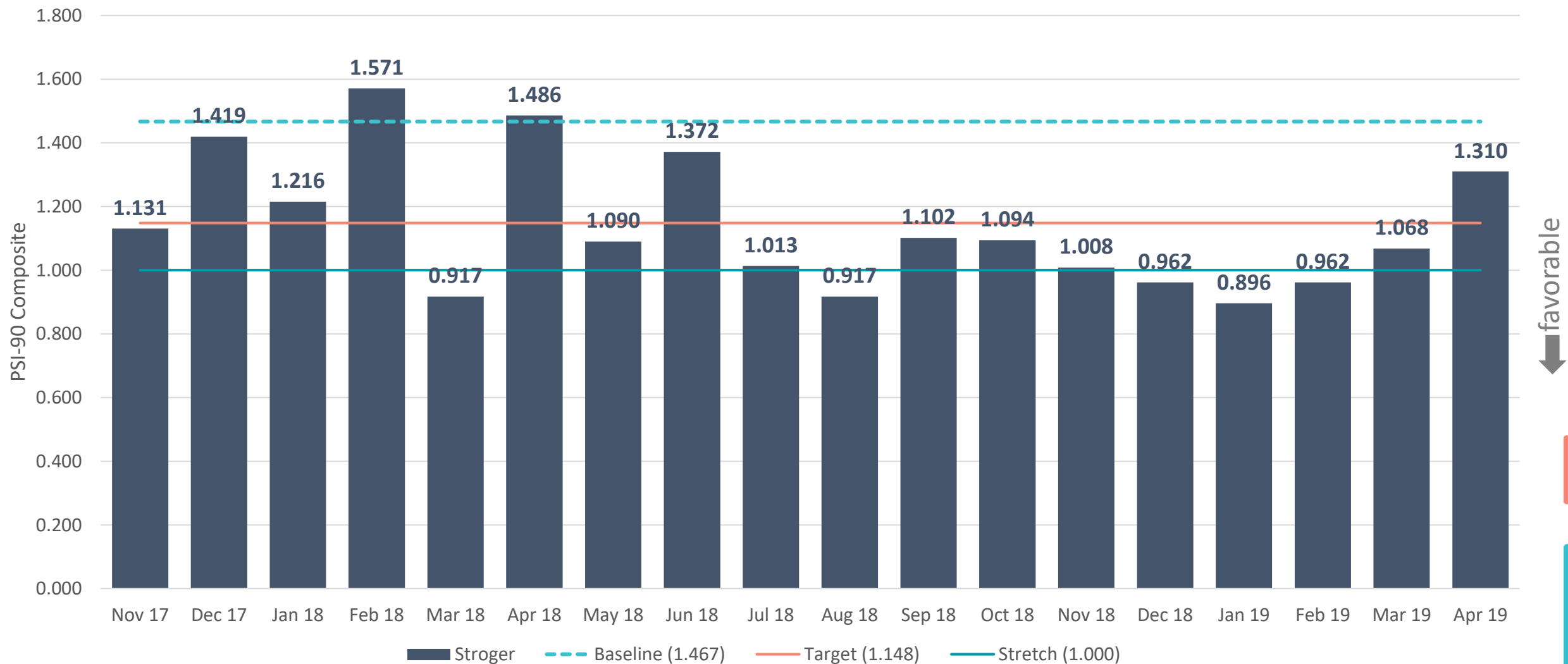
Margaret Carroll, MS, MBA, RN

Associate Nurse Executive, Nursing Quality,  
Professional Development and APRN Practice



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# Patient Safety and Adverse Events Composite (PSI-90)





# PSI -90 Composite (Cook County PSI-90 includes 6/10 identified in the CMS PSI-90)

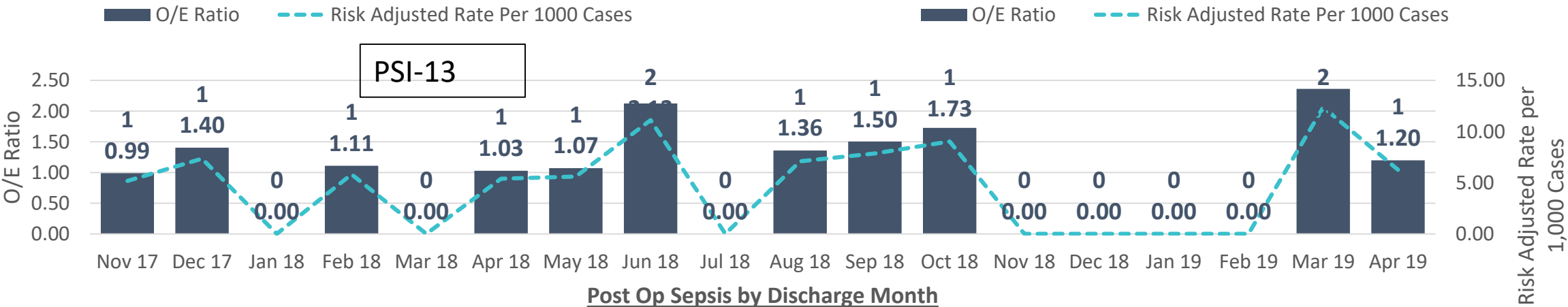
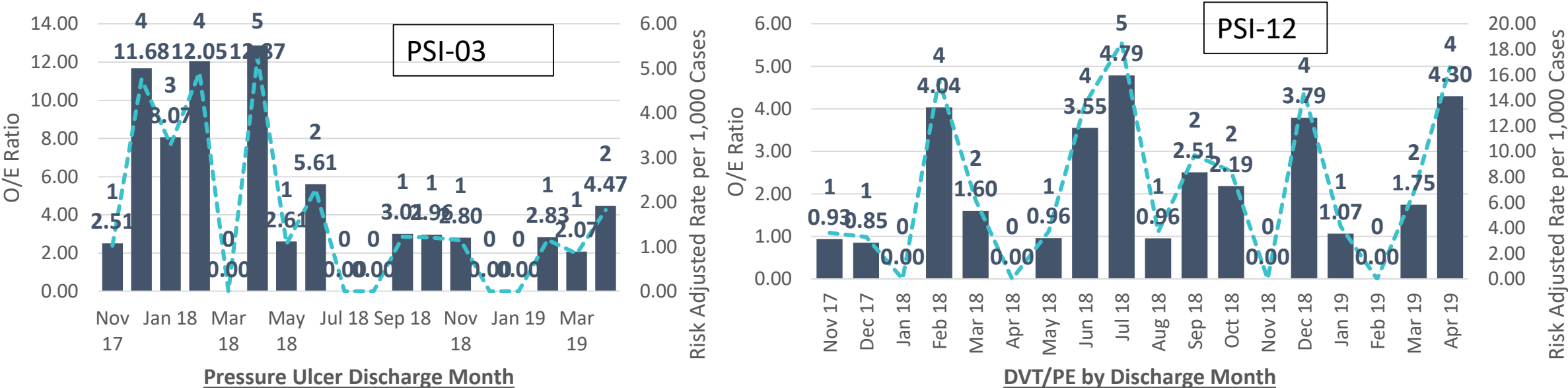
- [Top Performing Metrics](#)

- PSI-06 (pneumothorax)
- PSI-09 (periop hemorrhage)
- PSI-11 (respiratory failure)

- [Opportunities for Improvement](#)

- PSI-03 (Pressure Ulcer)
- PSI-12 (Perioperative Pulmonary embolism/deep venous thrombosis, known as VTE-venous thromboembolism)
- PSI-13 (post op sepsis)

# O/E Ratio and Risk Adjusted Rate per 1,000 Cases



# Current Processes for VTE and HAPI prevention

- Quarterly Prevalence surveillance with action planning (Incidence surveillance to be added in September)
- Braden Assessment and VTE(venous thromboembolism) Risk Assessment
- Inclusion of at risk patients and prevention strategies during hand off
- Optimization of mechanical devices such as sequential compression devices (SCD) to prevent VTE
- Turning Clock and Turning Schedules
- Wound/Ostomy nurses serving as consultants to physicians and staff receiving notification of all at risk patients

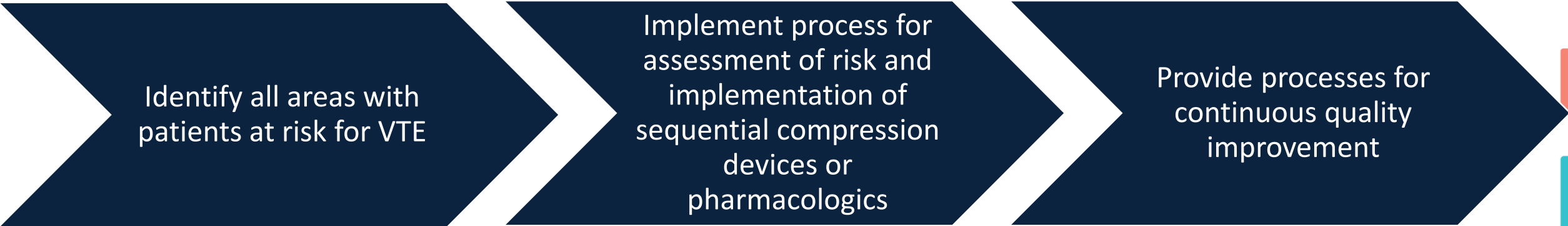
# Planned Interventions-VTE

## Current State:

- \*Inpatient units have sequential compression devices for inpatients
- \*a risk assessment tool for VTE

## Future State:

- \*Evaluate use of sequential compression devices for outpatients undergoing procedures > 1 hour or requiring anesthesia
- \*Create a standard VTE prevention plan for all areas such as endoscopy



Identify all areas with patients at risk for VTE

Implement process for assessment of risk and implementation of sequential compression devices or pharmacologics


Provide processes for continuous quality improvement

# Planned Interventions-Pressure Ulcer

**Project aim:** To recommend, develop and implement evidence-based practices relative to skin care and pressure injury prevention and intervention at Cook County Health System

**GOAL:** Decrease HAPI by 15% by 11/2019

Reduce all HAPI to meet unit-specific NDNQI Benchmark for 3 out of 4 quarters in FY 19-20



4 Eyes  
documentation to  
eliminate missing  
wounds on  
admission

Developing quality  
champions at the  
unit level,  
INCLUDING  
perioperative

Patient specific  
nurse care planning

# Left without Being Seen



Dr. Lauren Smith, MD, MBA

Chair of the Division of Observation & Quality Department  
of Emergency Medicine

Dr. AnnMarie McDonagh, DNP, RN, MBA

Director, Emergency Room Nursing

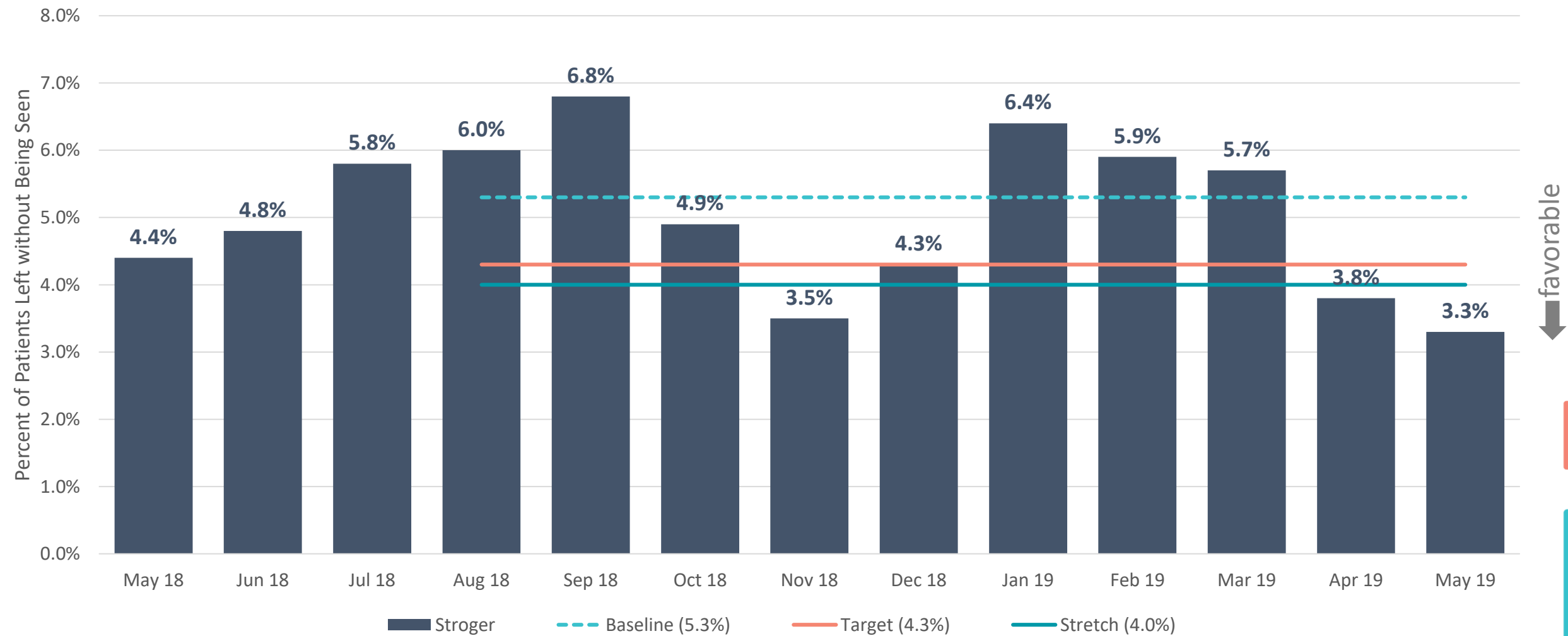


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# Left without Being Seen

Patient Encounters in ED that Ended with Patient Leaving Before Being Seen by Certified Physician



# ED

## Three Metrics to Review

Median ED Time  
from Arrival To  
Depart (admit)

Median ED Time  
from Arrival To  
Depart (discharge)

Left Without Being  
Seen

# Left Without Being Seen

- Have exceeded our stretch!

## How did we do it?

Our list of interventions:

1. Focus on throughput by staff
2. Internal Waiting rooms helped with gaining more space and our new yellow team and green team changes
3. Education of clerks
4. Charge RN Education
5. Shift change report with charge RNs and Coordinators daily to review metrics in real time

# Our Plan



Review data for  
timing from arrival  
to departure for  
discharges

Review data for  
timing from arrival  
to departure for  
admissions

Plan for  
opportunities  
discovered to  
decrease the timing

# Questions?



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